

# Innovation Task Force Fly By

## Hi There,

Welcome to the Transportation Security Administration's (TSA) Innovation Task Force (ITF) newsletter. ITF falls under TSA's Requirements and Capabilities Analysis (RCA). Our quarterly newsletter will serve as a resource to learn about need-to-know ITF information and recent ITF activities.



## Who We Are

In support of the TSA's mission to protect the nation's transportation systems, ITF is focused on identifying and quickly demonstrating innovative security solutions in TSA's operational environment.



## Our Process

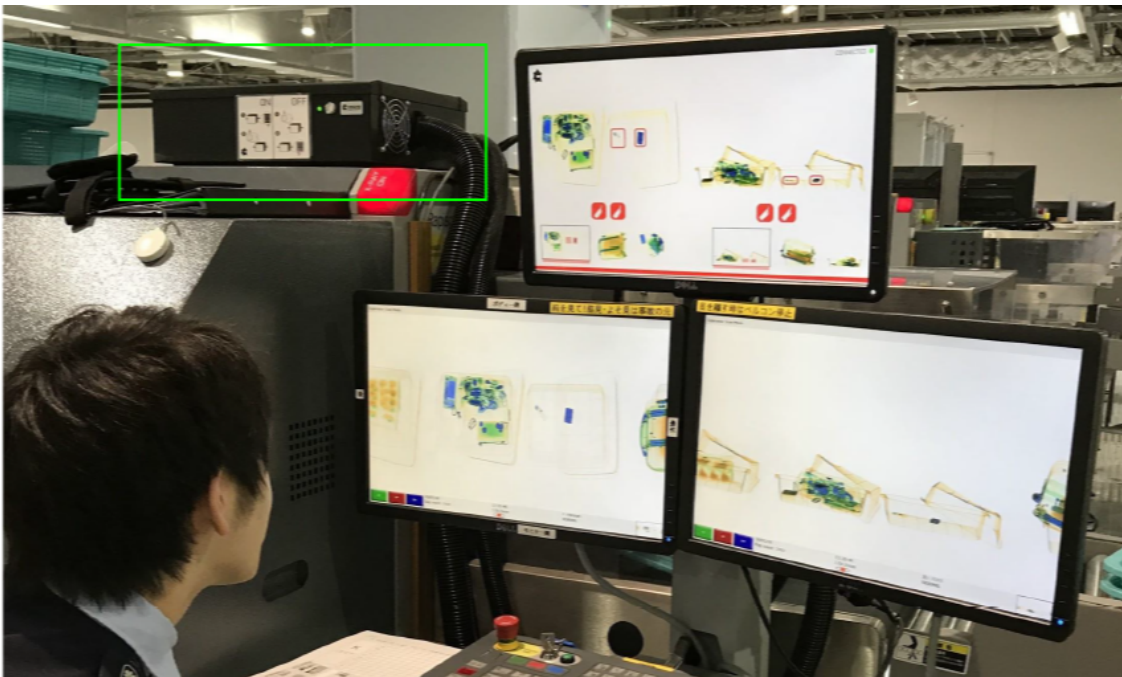
Our process follows these three steps:

1. We identify solutions by convening the aviation security ecosystem.
2. We establish the capability for TSA to quickly pilot innovative solutions.
3. We analyze effectiveness to achieve an optimized future state and provide solution providers with data to improve.

The ITF team combines both a breadth and depth of experience that allows us to carry out the ITF and TSA missions. In total, our team boasts **110 years of combined aviation security experience**. This includes six team members with direct TSA field experience and six team members with government experience outside of TSA. We have intentionally built a team around the skills and experience needed to fulfill the ITF vision. Eight of our team members came to ITF with previous contracting and acquisition experience, and four came bringing experience from the testing community. Lastly, five members of our team bring value from previous industry experience, and their background continues to help us grow our unique industry engagement strategies that allow TSA to partner with airports, airlines, and vendor partners to advance security solutions in our nation's transportation systems.

---

## **ITF in Action: Enhancing Security through Human and Computer Insights – Demonstrating an Automated Threat Recognition (ATR) System**



ITF selected to demonstrate the capabilities of the **Syntech ONE (TRL 7), an Automated Threat Recognition (ATR) system** produced by Synapse Technology as a Transportation Security Officer (TSO) Tool. Synapse Technology, the Silicon Valley venture-backed company, developed the Syntech ONE to bring computer vision and artificial intelligence techniques to property security screening systems. Using machine learning to flag threats, Syntech ONE is intended to reduce the cognitive burden of field officers and improve the detection and identification of known threats. ITF demonstrated Syntech ONE for about six weeks at both Phoenix Sky Harbor International Airport (PHX) and McCarran International Airport (LAS). At both locations ITF coordinated with local airport authorities, the Office of Training and Development (OTD), the Human Performance Branch (HPB), and the Office of Testing and Evaluation (OT&E) to conduct the demonstration and associated data collection, informing potential future requirements of ATR technology. Pending data collection results and TSA stakeholder interest, ITF will

conduct a Phase Two of the Syntech ONE demonstration. For example, there is potential to explore whether the Syntech ONE algorithm can be use as part of an integrated property screening system in support of Computed Tomography (CT) image analysis.

---

## **2019 Broad Agency Announcement - Now Live!**

ITF is starting the fiscal year with plans for new and exciting opportunities for industry to get involved in the future of TSA. As part of its new approach for agile solicitations, **ITF released its [IDEA Targeted Broad Agency Announcement \(BAA\) 2019](#) on October 31**. This Targeted BAA contains two problem statements, down from nine in last year's BAA, focused on Portable Screening and Alarm Resolution. This change was made with a mind to expediting the BAA review timeline, finding solutions to TSA's most pressing issues, and creating room in ITF's FY20 solicitation plans for additional intake opportunities. Like in years past, the vendors that are selected will have the opportunity to work with ITF to demonstrate their solution in a live checkpoint environment.

Additionally, we would like to invite you to join us on **Friday, December 6 for an IDEA Targeted BAA Industry Day at TSA's Headquarters** in Arlington, Virginia. The day will include an overview of ITF and current initiatives, and a discussion of the requirements for the IDEA Targeted BAA 2019. The day will also include time to network with your peers in the transportation security industry. **To RSVP to attend the event and to receive additional details, please send an email to [IDEA@tsa.dhs.gov](mailto:IDEA@tsa.dhs.gov) by November 20**. Space is limited, so space will be limited to two (2) people per company and will be allotted on a first-come-first-serve basis.

If your ideas for solutions do not fall within these two problem statements, don't worry, there will be additional avenues to submitting your ideas to TSA, both with ITF's other upcoming solicitations and elsewhere. Check out the [IDEA Targeted BAA 2019](#) and much more to come this year - we can't wait to hear your ideas!

---

## **DHS Science & Technology (S&T) Directorate Self-Screening Challenge**

ITF, in conjunction with The Department of Homeland Security (DHS) Science and Technology Directorate (S&T) Apex Screening at Speed (SaS) program, support a future vision for increasing aviation security effectiveness from curb-to-gate while dramatically reducing wait times and improving the passenger experience. To enable this vision, ITF and Apex SaS are considering the development of a **passenger self-screening solution** to transform the TSA's Pre✓® concept of operations.

Just like self-checkout at grocery stores, self-tagging checked baggage, or ATM machines, many patrons

prefer an experience that they can complete all by themselves, at their own pace. Personal screening stations would increase the overall passenger screening throughput. ITF and Apex SaS is exploring ideas to bring similar concepts to the passenger screening process. ITF and Apex SaS would like to collaborate with stakeholders to develop a solution that would:

- Allow for passenger on-person screening and divestment of personal property (for X-ray screening) to occur in a single step, compared to the two distinct steps that exist at airports today
- Enable passengers to directly receive on-person alarm information while divesting
- Allow passengers to complete the screening process more quickly while maintaining or improving the current security posture at the airport checkpoint

Apex SaS has released an RFI to industry, seeking information about potential or existing capabilities to better understand how ITF and Apex SaS can work to achieve this vision.



In this video learn what TSA's Innovation Task Force is and how ITF strives to enhance the traveling public's experience through advanced technology all while ensuring they arrive safely to their destination.

---

## **Domestic and International Collaboration to Design Future Security Checkpoints**

On Wednesday, August 21, 2019, ITF hosted an invite-only design workshop at the TSA Systems Integration Facility (TSIF) regarding the revised [Checkpoint Requirements and Planning Guide \(CRPG\)](#), a document released in December 2018 intended to support future renovations, design, and enhancements to security checkpoints. The CRPG Design Workshop provided a forum for ITF to present the revised CRPG and generate an engaging discussion on various checkpoint design elements among the 42 key

stakeholders across TSA, airlines, architects, and industry who were in attendance.

To further support this effort, ITF will convene international partners for an invite-only design workshop in January 2020 to plan for checkpoints today and in the future. The event will not only focus on presenting the CRPG, but it will also provide a forum for discussion on checkpoint design elements, emphasizing collaboration across cultures, facility sizes, and capabilities. Learning from the diversity of participants' current checkpoint states, and envisioning the checkpoint of the future together, attendees are empowered to leverage the knowledge of the group to improve checkpoint design. ITF will also continue to strive for international standardization of design, equipment, and process requirements.

---

## ITF's Tour of the Innovation Checkpoint Draws Attention and Invites Collaboration



Photo: K.M. Cannon/Las Vegas Review Journal @KMCannonPhoto

Prior to the Future Travel Experience (FTE) Global 2019 conference in September 2019, TSA hosted a media event and vendor tour of the Innovation Checkpoint at Las Vegas McCarran International Airport (LAS). The media event resulted in several instances of positive media coverage for TSA from local and national media outlets.

To learn more about our Innovation Checkpoint at LAS read the [USA Today Feature](#) or the [Las Vegas Review article](#) on the event!

---

## Connect with ITF

We are excited to attend The Consumer Electronic Show (CES) in Las Vegas in January 2020 and hope to see you there! For more information on CES, visit the [CES website](#).

For more information about TSA's Innovation Task Force and ways to collaborate with us visit [our website](#)!

